

What Is Claimed Is:

- 1 1. A method for controlling access to files within a plurality of virtual
2 servers, wherein the plurality of virtual servers operate within separate virtual
3 environments on a single computing device, comprising:
4 accepting a file access request;
5 determining if the file access request originated from within a virtual
6 server of the plurality of virtual servers, wherein the virtual server operates within
7 a virtual environment that is insulated from other virtual environments associated
8 with other virtual servers;
9 if the file access request originated from within the virtual server,
10 determining if the file access request is for a new file; and
11 if the file access request is for a new file,
12 assigning an identifier to the new file, wherein the
13 identifier can be used to identify the virtual server, and
14 creating the new file within a storage area
15 associated with a computing device hosting the plurality of
16 virtual servers.
- 1 2. The method of claim 1, wherein if the file access request is for an
2 existing file, the method further comprises:
3 retrieving the identifier assigned to the existing file;
4 determining if the identifier is associated with the virtual server that
5 generated the file access request; and
6 if the identifier is associated with the virtual server that generated the file
7 access request, allowing access to the existing file.

1 3. The method of claim 2, wherein if the file access request is a
2 request to delete the existing file, the method further comprises deleting the
3 existing file.

1 4. The method of claim 2, wherein if the file access request is a
2 request to modify the existing file, the method further comprises modifying the
3 existing file.

1 5. The method of claim 1, wherein if the file access request is a
2 request to allocate additional file space, the method further comprises:
3 determining if space is remaining in the storage area associated with the
4 computing device that is available to the virtual server; and
5 if space is remaining in the storage area that is available to the virtual
6 server, allocating the additional file space.

1 6. The method of claim 1, further comprising allowing a system
2 administrator to establish an amount of storage within the storage area associated
3 with the computing device that is available to the virtual server within the
4 plurality of virtual servers.

1 7. The method of claim 1, wherein if the file access request did not
2 originate from within the virtual server, the method further comprises:
3 determining if the file access request is a request to update the identifier;
4 and
5 if the file access request is a request to update the identifier, updating the
6 identifier.

1 8. A computer-readable storage medium storing instructions that
2 when executed by a computer cause the computer to perform a method for
3 controlling access to files within a plurality of virtual servers, wherein the
4 plurality of virtual servers operate within separate virtual environments on a single
5 computing device, comprising:

6 accepting a file access request;

7 determining if the file access request originated from within a virtual
8 server of the plurality of virtual servers, wherein the virtual server operates within
9 a virtual environment that is insulated from other virtual environments associated
10 with other virtual servers;

11 if the file access request originated from within the virtual server,

12 determining if the file access request is for a new file; and

13 if the file access request is for a new file,

14 assigning an identifier to the new file, wherein the

15 identifier can be used to identify the virtual server, and

16 creating the new file within a storage area

17 associated with a computing device hosting the plurality of

18 virtual servers.

1 9. The computer-readable storage medium of claim 8, wherein if the
2 file access request is for an existing file, the method further comprises:

3 retrieving the identifier assigned to the existing file;

4 determining if the identifier is associated with the virtual server that
5 generated the file access request; and

6 if the identifier is associated with the virtual server that generated the file
7 access request, allowing access to the existing file.

1 10. The computer-readable storage medium of claim 9, wherein if the
2 file access request is a request to delete the existing file, the method further
3 comprises deleting the existing file.

1 11. The computer-readable storage medium of claim 9, wherein if the
2 file access request is a request to modify the existing file, the method further
3 comprises modifying the existing file.

1 12. The computer-readable storage medium of claim 8, wherein if the
2 file access request is a request to allocate additional file space, the method further
3 comprises:

4 determining if space is remaining in the storage area associated with the
5 computing device that is available to the virtual server; and

6 if space is remaining in the storage area that is available to the virtual
7 server, allocating the additional file space.

1 13. The computer-readable storage medium of claim 8, further
2 comprising allowing a system administrator to establish an amount of storage
3 within the storage area that is available to the virtual server within the plurality of
4 virtual servers.

1 14. The computer-readable storage medium of claim 8, wherein if the
2 file access request did not originate from within the virtual server, the method
3 further comprises:

4 determining if the file access request is a request to update the identifier;
5 and

6 if the file access request is a request to update the identifier, updating the
7 identifier.

1 15. An apparatus that facilitates controlling access to files within a
2 plurality of virtual servers, wherein the plurality of virtual servers operate within
3 separate virtual environments on a single computing device, comprising:
4 an accepting mechanism that is configured to accept a file access request;
5 a first determining mechanism that is configured to determine if the file
6 access request originated from within a virtual server of the plurality of virtual
7 servers, wherein the virtual server operates within a virtual environment that is
8 insulated from other virtual environments associated with other virtual servers;
9 a second determining mechanism that is configured to determine if the file
10 access request is for a new file;
11 a creating mechanism that is configured to create the new file within a
12 storage area associated with a computing device hosting the plurality of virtual
13 servers if the file request is for a new file; and
14 an assigning mechanism that is configured to assign an identifier to the
15 new file, wherein the identifier can be used to identify the virtual server.

1 16. The apparatus of claim 15, further comprising:
2 a retrieving mechanism that is configured to retrieve the identifier assigned
3 to an existing file;
4 a third determining mechanism that is configured to determine if the
5 identifier is associated with the virtual server that generated the file access
6 request; and
7 an accessing mechanism that is configured to allow access to the existing
8 file if the identifier is associated with the virtual server that generated the file.

1 17. The apparatus of claim 16, further comprising a deleting
2 mechanism that is configured to delete the existing file if the file access request is
3 a request to delete the existing file.

1 18. The apparatus of claim 16, further comprising a modifying
2 mechanism that is configured to modify the existing file if the file access request
3 is a request to modify the existing file.

1 19. The apparatus of claim 15, further comprising:
2 a fourth determining mechanism that is configured to determine if space is
3 remaining in the storage area associated with the computing device that is
4 available to the virtual server; and
5 an allocating mechanism that is configured to allocate additional space
6 from the storage area.

1 20. The apparatus of claim 15, further comprising an establishing
2 mechanism that is configured to allow a system administrator to establish an
3 amount of storage within the storage area that is available to the virtual server.

1 21. The apparatus of claim 15, further comprising:
2 a fifth determining mechanism that is configured to determine if the file
3 access request is a request to update the identifier; and
4 an updating mechanism that is configured to update the identifier if the file
5 access request is a request to update the identifier.